

## MODIFIED RECORD FIRE (MRF) RANGE NARRATIVE DESCRIPTION

**Purpose:** The information in this document is based on TC 25-8 Training Ranges dated 5 April 2004, FCC 17806. The Modified Record Fire range is used to train and test individual soldiers on the skills necessary to identify, engage, and defeat stationary infantry targets for day/night qualification requirements with the M16 and M4 rifles. This range combines the capabilities of 17803 Automated Field Fire (AFF), 17805 Automated Record Fire (ARF), and the 17808 Automated Night Fire (ANF) to reduce land and maintenance requirements and increase efficiencies.

The training intent of the MRF range is to meet the Army's requirement that every soldier assigned a M16 or M4 rifle conduct semiannual qualification with their rifle.

During the qualification process, a soldier will be presented 40 targets to detect, identify, and engage. The soldier must successfully engage 23 or more targets to be qualified. The soldier will engage these targets while firing from the fighting position as well as firing in a prone position beside the fighting position. Soldiers who fail to qualify will be retrained and given another attempt to qualify.

The MRF range is used by every Army unit assigned the M16 or M4 rifle: Active, Reserve, and National Guard. The range is also used to support the training of United States Military Academy (USMA) and Army Reserve Officers Training Corps (ROTC) cadets.

**Firing Line:** The standard firing line is 320m long with sixteen 20m wide lanes. Each lane must have a fighting position and an adjacent position for the soldier to conduct prone firing. Firing positions should be on slightly elevated ground and designated with numbered markers. The standard fighting positions are shown in the Civil Details in the Appendix of this document.

### Downrange Area:

**Layout.** Refer to Layout Details in the Appendix of this document for a typical Modified Record Fire range layout. Target mechanism placements must conform as closely as possible to the established distances, but may vary by  $\pm 1$  meter in order to avoid undesirable locations such as depressions or drainage.

**Targets.** This range has 16 firing lanes; each lane is 20 meters wide by 300 meters long. A single lane has nine fully automated stationary infantry targets: 2 at 50m, 1 at 75m, 1 at 100m, 1 at 150m, 1 at 200m, 1 at 175m, 1 at 250m, and 1 at 300m. Each target is equipped with night muzzle flash simulators that can be used at the determination of the trainer.

Primary features include:

- 144 Stationary infantry targets
- 16 Fighting positions

Targetry: All targets are fully automated and the event specific target scenario is computer driven and scored from the range operations center. The range operating system is fully capable of providing immediate performance feedback to the using participants.

Associated Range Operations and Control facilities:

Standard Small Arms ROCA Facilities except:  
Range Operations Center (ROC)- Small (17123) replaced by ROC-Tower

Requirement Document:

FM 3-22.9 Rifle Marksmanship M16A1, M16A2/3, M16A4, M4 Carbine

Additional Information: Night firing is accomplished in the same process as the day qualification. All targets should be thermal capable. Unassisted night-fire is accomplished from the baseline, firing at the 50m targets. One of the 50m F-type silhouettes should be replaced with an E-type silhouette during Unassisted Night Fire (UNF). The 50m target emplacements are equipped with Night Muzzle Flash Simulators (NMFS) to facilitate unassisted night fire requirements.